

Trilliguese

by Arya Akhavan (January 2013)

Angles for R.I. = 1.610

163 + 15 girdles = 178 facets

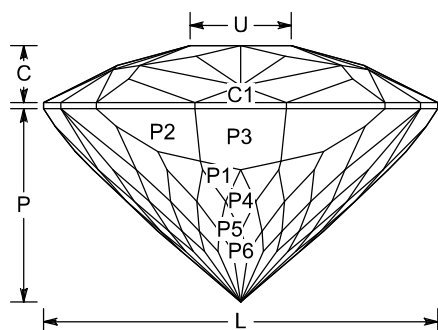
3-fold, mirror-image symmetry

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$L/W = 1.042$ $T/W = 0.277$ $U/W = 0.267$

$P/W = 0.510$ $C/W = 0.151$

$Vol./W^3 = 0.229$



PREFORM

P1	45.51°	02-06-10-14-18-22-26-30-34-38-42-46-50-54-58-62-66-70-74-78-82-86-90-94	Cut to centerpoint.
G1	90.00°	13-19-45-51-77-83	Set stone size.
G2	90.00°	04-28-36-60-68-92	Meet P1, G1
G3	90.00°	96-32-64	Meet P1, G2
X1	65.39°	13-19-45-51-77-83	Meet P1, G1 (temporary facet)

PAVILION

P2	68.32°	04-28-36-60-68-92	Level girdle.
P3	68.99°	96-32-64	Level girdle.
P4	43.51°	96-04-08-12-16-20-24-28-32-36-40-44-48-52-56-60-64-68-72-76-80-84-88-92	Meet P1, P3 (only 3 facets meet)
P5	42.00°	02-06-10-14-18-22-26-30-34-38-42-46-50-54-58-62-66-70-74-78-82-86-90-94	Meet P1, P4
P6	40.50°	96-04-08-12-16-20-24-28-32-36-40-44-48-52-56-60-64-68-72-76-80-84-88-92	Meet P4, P5
P7	47.06°	13-19-45-51-77-83	Meet P1, G1; P1, P4 (overcut X1)

CROWN

C1	33.90°	96-32-64	Set girdle width.
C2	29.28°	04-28-36-60-68-92	Level girdle.
C3	29.28°	13-19-45-51-77-83	Level girdle.
C4	26.58°	10-22-42-54-74-86	Meet G1, G2, C2, C3
C5	26.58°	03-29-35-61-67-93	Meet G2, G3, C1, C2
C6	23.06°	02-30-34-62-66-94	Meet C1, C5
C7	22.10°	01-31-33-63-65-95	Meet C1, C5, C6
C8	15.16°	14-18-46-50-78-82	Meet C3, C4; C4, C5, C6
C9	16.25°	05-27-37-59-69-91	Meet C4, C5, C6, C8
T	0.00°	Table	Meet C7, C9; C8, C9

Well, you wanted it, so here you go. Good riddance. This was extremely frustrating to write - Portuguese designs work best in high symmetry, not a trillion. Doing this as an untruncated triangle was impossible. Works in materials from topaz to rutile (RI = 1.61 - 2.62) with no changes, but I prefer it in champagne topaz.

Suggested size = 15-30 mm

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